Volume 1 Introduction, Enveloping, and Acknowledgements Version 15

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997 -Functional Acknowledgement

• Minor Typographical corrections

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1. Scope

1.1. Identification

The purpose of the External Interface Specification (EIS) for X12 Overview and Interface Design document is to provide information on how the Defense Enrollment Eligibility Reporting System (DEERS) communicates with the outside world using the Accredited Standards Committee (ASC) X12 protocol. The goal of the X12 protocol is to provide a standardized message structure that allows Electronic Data Interchange (EDI) trading partners the ability to communicate in a non-proprietary format. Implementation of a standardized message gives trading partners the ability to make changes to their own systems, which do not result in dramatic modifications to their trading partners systems. For the Military Health System (MHS) to achieve the potential administrative cost savings with EDI, the standards that have been developed need to be implemented consistently by all organizations. Uniform implementation is critical to facilitate a smooth transition into the EDI environment.

1.2. System Overview

The Department of Defense (DoD) operates one of the largest health care systems worldwide. Care is provided directly through more than 160 military hospitals and 300 clinics and indirectly through TRICARE [formerly known as the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)], a cost-sharing health benefits program. The beneficiary population, estimated to be 17.2 million, includes Active Duty and Retired Army, Navy, Marine Corps, and Air Force Service members, their family members, and their survivors. In addition, legislative action and reciprocal agreements authorize the provision of health care to DoD, U.S. Coast Guard, United States Public Health Service, and National Oceanic and Atmospheric Administration personnel. This broad system of reciprocal health care delivery is referred to as MHS.

In 1974, the U. S. Congress directed DoD to initiate a program to improve the control and distribution of military health care services, to project and allocate costs for existing and planned health care programs, and to minimize fraudulent use of military health benefits by unauthorized persons. DoD recognized that such a program would require the establishment of a comprehensive database or uniform set of enrollment and eligibility information for every person entitled to military health care benefits. The task of creating such a database was complicated by the fact that required information was not uniformly maintained or consistently available from the participating Uniformed Services.

An initial requirement was the collection of enrollment and eligibility information in a consistent format from all participating Uniformed Services. The next step was the implementation of a system that would use the information to manage health benefit programs for eligible beneficiaries.

From July 1976 to July 1979, DoD conducted a series of studies and a demonstration project to examine alternative methods of implementing the enrollment/eligibility concept. The following two objectives were identified:

- Gather demographic and sociographic information on the population entitled to DoD benefits.
- Substantially reduce fraud and misuse of DoD health benefits.

To satisfy these objectives, DEERS was established in fiscal year 1979. In September 1979, a contract for the design, development, and implementation of DEERS was awarded and the system was placed in operation in February 1980.

Since that time, the original objectives and scope of DEERS have been expanded to include eligibility information for other Uniformed Services benefits and interface compatibility with other DoD systems and programs.

The DEERS Eligibility database was designed to meet the eligibility certification requirements of a wide range of health care providers and services. For example, TRICARE Fiscal Intermediaries (FIs) can query the Eligibility database as part of their claim processing cycle. In addition, CHCS personnel can inquire about eligibility before beneficiaries are admitted to Military Treatment Facilities (MTFs) and Dental Treatment Facilities (DTFs). Utilizing online Personnel update transactions, Uniformed Services personnel officers can query the Eligibility database, as well as write current information to the DEERS data records. The Eligibility database includes features that update the DEERS Enrollment database with information received through online transactions.

The Managed Care Support Contractor (MCSC) Interface is designed to provide claim and benefit relevant data to the organizations administering health benefits on behalf of the DoD Health Care Network.

1.3. Document Overview

The purpose of the EIS for X12 Overview and Interface Design document is to explain the X12 message structures that must be used by the MCSC and CHCS sites serving as an enrolling organization when sending a transaction into DEERS.

1.4. Global Document Notes

The terms "DEERS Identifier (ID) and DEERS ID" are referenced extensively throughout the EIS. The DEERS ID is actually a concatenated identification number consisting of the 9-digit DEERS Family ID and the 2-digit DEERS Beneficiary ID. The concatenation of these two ID numbers creates the DEERS ID.

2. Referenced Documents

The following documents are referenced in this document:

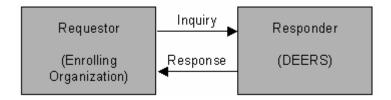
- ASC X12N-270/271 *Health Care Benefit Inquiry and Response*, Insurance Subcommittee, Version 4010; Washington Publishing Company, 1997.
- ASC X12N-275 Patient Information (UPDATE), Insurance Subcommittee, Version 4010; Washington Publishing Company, 1997.
- ASC X12-824 Application Advice, Electronic Data Interchange, X12 Standards, Draft Version 4 Release 1 (Document Number ASC X12S/97-372); 1997.
- Department of Defense DEERS/MHS Interface Operational Description, Version 13, dated April 14, 1999.
- DEERS Data Dictionary.
- Interface Operation Description (IOD), Version 14

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3. Interface Design

The general concept in X12, which predominates all types of transactions, is that there is an information source and an information receiver. This concept is consistent in any X12 transaction. The information source is considered to be the entity that has the answers to the questions being asked. The source is typically the payer, insurer, or an entity maintaining records. The entity regarded as the information receiver is described as the one asking the questions.

DEERS is typically considered to be the information source except in the instance of an enrollment, in which the roles are somewhat reversed.



X12 characterizes the individual who is the insured member as the 'Subscriber'. Anyone receiving health benefits because of their association with the subscriber is considered to be a 'Dependent' of that subscriber.

3.1. Interchange and Application Control Structures

Identifies options selected for implementation or exceptions to ASC X12 interchange and application control structures.

3.2. Application Control Structure Definitions and Concepts

Identifies options selected for implementation or exceptions to ASC X12 application control structure definitions and concepts.

3.3. Business Transaction Structure Definitions and Concepts

Identifies options selected for implementation or exceptions to ASC X12 business transaction structure definitions and concepts.

3.4. ICS Interchange Control Structures

Functional Group ID=

Introduction:

The purpose of this standard is to define the control structures for the electronic interchange of one or more encoded business transactions including the EDI encoded transactions of ASC X12. This standard provides the interchange envelope of a header and trailer for the electronic interchange through a data transmission, and it provides a structure to acknowledge the receipt and processing of this envelope.

Notes:

While communications flows both ways, the enveloping specification shows DMDC/DEERS as the receiver.

	Pos.	Seg.		Req.		Loop	Notes and
	No.	<u>ID</u>	<u>Name</u>	Des.	Max.Use	Repeat	Comments
M	010	ISA	Interchange Control Header	M	1		
M	020	GS	Functional Group Header	M	1		
M	030	GE	Functional Group Trailer	M	1		
M	040	IEA	Interchange Control Trailer	M	1		
	050	TA1	Interchange Acknowledgment	О	1		

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Segment: ISA Interchange Control Header

Position: 010

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose: To start and identify an interchange of zero or more functional groups and interchange-

related control segments

Syntax Notes:

Semantic Notes:

Comments:

	Ref.	Data					
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>	
M	ISA01	I01	Authorizat	tion Information Qualifier	M	ID 2/2	
			Code to ide	entify the type of information in the Authorization	n Infor	rmation	
			00	No Authorization Information Present Information in IO2)	(No M	leaningful	
M	ISA02	I02	Authorizat	tion Information	M	AN 10/10	
			interchange by the Auth	n used for additional identification or authorization e sender or the data in the interchange; the type of porization Information Qualifier (I01)			
			Blank or Ze	ero fill			
M	ISA03	I03	Security In	formation Qualifier	M	ID 2/2	
			Code to identify the type of information in the Security Information				
			00	No Security Information Present (No M Information in I04)	1 eanin	ıgful	
M	ISA04	I04	Security In	nformation	\mathbf{M}	AN 10/10	
			sender or th	I for identifying the security information about the data in the interchange; the type of information formation Qualifier (I03)			
			Space or Ze	ero fill			
M	ISA05	105	Interchang	ge ID Qualifier	M	ID 2/2	
			-	designate the system/method of code structure up or receiver ID element being qualified	sed to	designate	
			ZZ	Mutually Defined			
M	ISA06	I06	Interchang	ge Sender ID	\mathbf{M}	AN 15/15	
				on code published by the sender for other parties to route data to them; the sender always codes the element			
			Assigned by	y DMDC			

Version: 15

M	ISA07	105	Interchange ID (Qualifier	M	ID 2/2
			_	Qualifier to designate the system/method of code structure use the sender or receiver ID element being qualified		
			ZZ	Mutually Defined		
M	ISA08	107	Interchange Reco	eiver ID	M	AN 15/15
			used by the sender use this as a receive	e published by the receiver of the data; What as their sending ID, thus other parties serving ID to route data to them		
			Assigned by DMI	OC .		
			DMDCDEERS	1600NB		
				DMDC DEERS Interchange ID		
M	ISA09	I08	Interchange Date	e	M	DT 6/6
			Date of the intercl	hange		
M	ISA10	109	Interchange Tim	e	M	TM 4/4
			Time of the interc	hange		
M	ISA11	I10	Interchange Con	trol Standards Identifier	M	ID 1/1
				he agency responsible for the control stand aclosed by the interchange header and trail		sed by the
			Refer to 004010 I	Data Element Dictionary for acceptable co	de valı	ies.
M	ISA12	I11	Interchange Con	trol Version Number	M	ID 5/5
			This version number	ber covers the interchange control segmen	ts	
			00401	Draft Standards for Trial Use Approve by ASC X12 Procedures Review Boar 1997		
M	ISA13	I12	Interchange Con		M	N0 9/9
			A control number	assigned by the interchange sender		
			Must be the same	as IEA02		
M	ISA14	I13	Acknowledgmen	t Requested	M	ID 1/1
			Code sent by the s	sender to request an interchange acknowle	dgmer	nt (TA1)
			0	No Acknowledgment Requested		
M	ISA15	I14	Usage Indicator		M	ID 1/1
			Code to indicate v	whether data enclosed by this interchange ormation	envelo	pe is test,
			P	Production Data		
			T	Test Data		
M	ISA16	I15	Component Elen	nent Separator	M	AN 1/1
			a data element; the data elements with	able; the component element separator is a is field provides the delimiter used to sepa hin a composite data structure; this value resent separator and the segment terminator	rate co	omponent

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GS Functional Group Header **Segment:**

020 **Position:**

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose:

To indicate the beginning of a functional group and to provide control information

Syntax Notes:

Semantic Notes: 1 GS04 is the group date.

2 GS05 is the group time.

3 The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1 A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

	Ref.	Data				
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
M	GS01	479	Functional Identif	fier Code	M	ID 2/2
			Code identifying a	group of application related transaction se	ets	
			AG	Application Advice (824)		
			FA	Functional Acknowledgment (997)		
			НВ	Eligibility, Coverage or Benefit Inform	ation	(271)
			HS	Eligibility, Coverage or Benefit Inquiry	(270)
			PI	Patient Information (275)		
M	GS02	142	Application Sende	er's Code	M	AN 2/15
			Code identifying p partners	Code identifying party sending transmission; codes agreed to partners		rading
			Same as Interchang	ge Sender's ID		
M	GS03	124	Application Recei	ver's Code	M	AN 2/15
			Code identifying p partners	arty receiving transmission; codes agreed	to by	trading
			Same as Interchang	ge Receiver's ID		
M	GS04	373	Date		M	DT 8/8
			Date expressed as	CCYYMMDD		
M	GS05	337	Time		M	TM 4/8
			HHMMSSD, or HI	24-hour clock time as follows: HHMM, o HMMSSDD, where H = hours (00-23), M conds (00-59) and DD = decimal seconds;	= mi	nutes (00-

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			are expressed as fol	iths ((00-99)		
			Please use HHMMS	SS format			
M	GS06	28	Group Control Nu	ımber	M	N0 1/9	
			Assigned number o	riginated and maintained by the sender			
			Same as GE02				
M	GS07	455	Responsible Agend	cy Code	M	ID 1/2	
			Code used in conjustandard	nction with Data Element 480 to identify	the is	ssuer of the	
			X	Accredited Standards Committee X12			
M	GS08	480	Version / Release /	Industry Identifier Code	\mathbf{M}	AN 1/12	
			Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and position 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed				
			004010	Draft Standards Approved for Publication Procedures Review Board through October Use for transaction sets other that 270 /	ober 1		
			004010X092				

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Segment: \mathbf{GE} Functional Group Trailer

Position: 030

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose:

To indicate the end of a functional group and to provide control information

Syntax Notes:

Semantic Notes: 1 The data interchange control number GE02 in this trailer must be identical to the

same data element in the associated functional group header, GS06.

Comments: 1 The use of identical data interchange control numbers in the associated functional

group header and trailer is designed to maximize functional group integrity. The

control number is the same as that used in the corresponding header.

M	Ref. <u>Des.</u> GE01	Data <u>Element</u> 97	Name Number of Transaction Sets Included	Attr M	ributes N0 1/6
			Total number of transaction sets included in the functional grainterchange (transmission) group terminated by the trailer corelement	•	
M	GE02	28	Group Control Number	M	N0 1/9
			Assigned number originated and maintained by the sender		
			Same as GS06		

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Segment: IEA Interchange Control Trailer

Position: 040

Loop:

Level:

Usage: Mandatory

Max Use: 1

Purpose: To define the end of an interchange of zero or more functional groups and interchange-

related control segments

Syntax Notes:

Semantic Notes:

Comments:

M	Ref. <u>Des.</u> IEA01	Data <u>Element</u> I16	Name Number of Included Functional Groups	Attı M	ributes N0 1/5
			A count of the number of functional groups included in an ir	iterch	ange
M	IEA02	I12	Interchange Control Number	M	N0 9/9
			A control number assigned by the interchange sender		
			Same as ISA13		

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 ${\bf Segment:} \quad TA1 \ {\bf Interchange} \ {\bf Acknowledgment}$

Position: 050

Loop:

Level:

Usage: Optional

Max Use:

Purpose: To report the status of processing a received interchange header and trailer or the non-

delivery by a network provider

Syntax Notes:

Semantic Notes:

Comments:

	Ref.	Data		,		
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
M	TA101	I12	Interchange (Control Number	M	N0 9/9
			A control num	ber assigned by the interchange sender		
M	TA102	108	Interchange I	Date	\mathbf{M}	DT 6/6
			Date of the int	erchange		
M	TA103	109	Interchange T	Гіте	M	TM 4/4
			Time of the in	terchange		
M	TA104	I17	Interchange A	Acknowledgment Code	M	ID 1/1
			This indicates	the status of the receipt of the interchange con	ntrol st	tructure
			R	The Transmitted Interchange Control S and Trailer are Rejected Because of Er		ıre Header
M	TA105	I18	Interchange N	Note Code	\mathbf{M}	ID 3/3
			This numeric o	code indicates the error found processing the i	nterch	ange control
			001	The Interchange Control Number in the Trailer Do Not Match. The Value Fron Used in the Acknowledgment.		
			002	This Standard as Noted in the Control is Not Supported.	Standa	ards Identifier
			003	This Version of the Controls is Not Su	pporte	d
			004	The Segment Terminator is Invalid		
			005	Invalid Interchange ID Qualifier for Se	ender	
			006	Invalid Interchange Sender ID		
			007	Invalid Interchange ID Qualifier for Re	eceive	r
			008	Invalid Interchange Receiver ID		
			009	Unknown Interchange Receiver ID		

010	invalid Authorization Information Qualifier value
011	Invalid Authorization Information Value
012	Invalid Security Information Qualifier Value
013	Invalid Security Information Value
014	Invalid Interchange Date Value
015	Invalid Interchange Time Value
016	Invalid Interchange Standards Identifier Value
017	Invalid Interchange Version ID Value
018	Invalid Interchange Control Number Value
019	Invalid Acknowledgment Requested Value
020	Invalid Test Indicator Value
021	Invalid Number of Included Groups Value
022	Invalid Control Structure
023	Improper (Premature) End-of-File (Transmission)
024	Invalid Interchange Content (e.g., Invalid GS Segment)
025	Duplicate Interchange Control Number
026	Invalid Data Element Separator
027	Invalid Component Element Separator
028	Invalid Delivery Date in Deferred Delivery Request
029	Invalid Delivery Time in Deferred Delivery Request
030	Invalid Delivery Time Code in Deferred Delivery Request
031	Invalid Grade of Service Code

4. Acknowledgments

4.1. 997 Functional Acknowledgment

Functional Group ID=FA

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

	Pos.	Seg.		Req.		Loop	Notes and
	No.	<u>ID</u>	<u>Name</u>	Des.	Max.Use	Repeat	Comments
M	010	ST	Transaction Set Header	M	1		n1
M	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2	_	_	999999	
	030	AK2	Transaction Set Response Header	0	1		n3
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		c1
	050	AK4	Data Element Note	О	99		
M	060	AK5	Transaction Set Response Trailer	M	1		
M	070	AK9	Functional Group Response Trailer	M	1		
M	080	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.

The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.

There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

- 2. AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.
- 3. AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

Transaction Set Comments

1. The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

Segment: ST Transaction Set Header

Position: 010

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g., 810

selects the Invoice Transaction Set).

Comments:

	Ref.	Data						
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>		
M	ST01	143	Transaction	Set Identifier Code	M	ID 3/3		
			Code unique	ly identifying a Transaction Set				
			997	Functional Acknowledgment				
M	ST02	329	Transaction	Set Control Number	M	AN 4/9		
				Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
			Must be same	e value as SE02				

Segment: AK1 Functional Group Response Header

Position: 020

Loop:

Level:

Usage: Mandatory

Max Use: 1

Purpose: To start acknowledgment of a functional group

Syntax Notes:

Semantic Notes: 1 AK101 is the functional ID found in the GS segment (GS01) in the functional group

being acknowledged.

 $2\quad$ AK102 is the functional group control number found in the GS segment in the

functional group being acknowledged.

Comments:

Data Element Summary

	Ref.	Data			
	Des.	Element	<u>Name</u>		Attributes
M	AK101	479	Functional Identifi	ier Code	M ID 2/2
			Code identifying a g	group of application related transaction se	ets
			AG	Application Advice (824)	
			FA	Functional Acknowledgment (997)	
			НВ	Eligibility, Coverage or Benefit Informa	ation (271)
			HS	Eligibility, Coverage or Benefit Inquiry	(270)
			PI	Patient Information (275)	
M	AK102	28	Group Control Nu	mber	M N0 1/9

Assigned number originated and maintained by the sender

Segment: AK2 Transaction Set Response Header

Position: 030

Loop: AK2 Optional

Level:

Usage: Optional

Max Use:

Purpose: To start acknowledgment of a single transaction set

Syntax Notes:

Semantic Notes: 1 AK201 is the transaction set ID found in the ST segment (ST01) in the transaction

set being acknowledged.

2 AK202 is the transaction set control number found in the ST segment in the

transaction set being acknowledged.

Comments:

Data Element Summary

	Ref.	Data				
	Des.	Element	<u>Name</u>		Attr	ibutes
M	AK201	143	Transaction S	Set Identifier Code	\mathbf{M}	ID 3/3
			Code uniquely	y identifying a Transaction Set		
			270	Eligibility, Coverage or Benefit Inquiry		
			271	Eligibility, Coverage or Benefit Information	ation	
			275	Patient Information		
			824	Application Advice		
M	AK202	329	Transaction S	Set Control Number	M	AN 4/9
			T1	. 1 1 4 1		. ,

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Segment: AK3 Data Segment Note

Position: 040

Loop: AK3 Optional

Level:

Usage: Optional

Max Use: 1

Purpose: To report errors in a data segment and identify the location of the data segment

Syntax Notes:

Semantic Notes:

Comments:

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
M	AK301	721	Segment ID Code		M	ID 2/3
			Code defining the s Number 77)	egment ID of the data segment in error (S	ee A	ppendix A -
M	AK302	719	Segment Position i	n Transaction Set	M	N0 1/6
				nt position of this data segment from the s transaction set header is count position 1	tart o	f the
	AK303	447	Loop Identifier Co	ode	0	AN 1/6
			The loop ID numbe data element in segn	r given on the transaction set diagram is t ments LS and LE	he va	lue for this
	AK304	720	Segment Syntax Error Code		0	ID 1/3
			Code indicating erro	or found based on the syntax editing of a	segm	ent
			1	Unrecognized segment ID		
			2	Unexpected segment		
			3	Mandatory segment missing		
			4	Loop Occurs Over Maximum Times		
			5	Segment Exceeds Maximum Use		
			6	Segment Not in Defined Transaction Se	et	
			7	Segment Not in Proper Sequence		
			8	Segment Has Data Element Errors		

Segment: AK4 Data Element Note

Position: 050

Loop: AK3 Optional

Level:

Usage: Optional Max Use: 99

Purpose: To report errors in a data element or composite data structure and identify the location of

the data element

Syntax Notes:

Semantic Notes: 1 In no case shall a value be used for AK404 that would generate a syntax error, e.g.,

an invalid character.

Comments:

			2 4.04 2.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	Ref.	Data					
	Des.	Element	<u>Name</u>		Attr	<u>ributes</u>	
M	AK401	C030	Position in Segn	nent	M		
			position of a com the component da count starts with	the relative position of a simple data element apposite data structure combined with the relatate element within the composite data struct 1 for the simple data element or composite of the segment ID	ative p ure, ii	position of n error; the	
M	C03001	722	Element Position	n in Segment	M	N0 1/2	
			This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID				
	C03002	1528	Component Dat	a Element Position in Composite	O	N0 1/2	
			To identify the coerror	omponent data element position within the c	ompo	site that is in	
	AK402	725	Data Element R	eference Number	O	N0 1/4	
			Reference number Dictionary	er used to locate the data element in the Data	a Elen	nent	
M	AK403	723	Data Element S	yntax Error Code	M	ID 1/3	
			Code indicating t	he error found after syntax edits of a data el	emen	t	
			1	Mandatory data element missing			
			2	Conditional required data element missi	ing.		
			3	Too many data elements.			
			4	Data element too short.			
			5	Data element too long.			
			6	Invalid character in data element.			

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AK404	724	Copy of Bad	Copy of Bad Data Element		
		10	Exclusion Condition Violated		
		9	Invalid Time		
		8	Invalid Date		
		7	Invalid code value.		

Segment: AK5 Transaction Set Response Trailer

Position: 060

Loop: AK2 Optional

Level:

Usage: Mandatory

Max Use:

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

Syntax Notes:

Semantic Notes:

Comments:

			Data Elem	ent Summary		
	Ref.	Data				
	Des.	Element	Name		Att	<u>ributes</u>
M	AK501	717	Transaction Set A	cknowledgment Code	M	ID 1/1
			Code indicating acc transaction set	cept or reject condition based on the synt	ax edi	ting of the
			A	Accepted		
			E	Accepted But Errors Were Noted		
			M	Rejected, Message Authentication Cod	le (MA	C) Failed
			R	Rejected		
			W	Rejected, Assurance Failed Validity To	ests	
			X	Rejected, Content After Decryption Co Analyzed	ould N	ot Be
	AK502	718	Transaction Set S	yntax Error Code	O	ID 1/3
			Code indicating err	or found based on the syntax editing of a	transa	action set
			1	Transaction Set Not Supported		
			2	Transaction Set Trailer Missing		
			3	Transaction Set Control Number in He Not Match	ader a	nd Trailer Do
			4	Number of Included Segments Does N Count	ot Ma	tch Actual
			5	One or More Segments in Error		
			6	Missing or Invalid Transaction Set Ide	ntifier	
			7	Missing or Invalid Transaction Set Con	ntrol N	lumber
			8	Authentication Key Name Unknown		
			9	Encryption Key Name Unknown		
			10	Requested Service (Authentication or l Available	Encryp	oted) Not
			11	Unknown Security Recipient		

		12	Incorrect Message Length (Encryption Only)
		13	Message Authentication Code Failed
		15	Unknown Security Originator
		16	Syntax Error in Decrypted Text
		17	Security Not Supported
		23	Transaction Set Control Number Not Unique within the Functional Group
		24	S3E Security End Segment Missing for S3S Security Start Segment
		25	S3S Security Start Segment Missing for S3E Security End Segment
		26	S4E Security End Segment Missing for S4S Security Start Segment
		27	S4S Security Start Segment Missing for S4E Security End Segment
AK503	718	Transaction Set S	yntax Error Code O ID 1/3
		Code indicating err	or found based on the syntax editing of a transaction set
		1	Transaction Set Not Supported
		2	Transaction Set Trailer Missing
		3	Transaction Set Control Number in Header and Trailer Do Not Match
		4	Number of Included Segments Does Not Match Actual Count
		5	One or More Segments in Error
		6	Missing or Invalid Transaction Set Identifier
		7	Missing or Invalid Transaction Set Control Number
		8	Authentication Key Name Unknown
		9	Encryption Key Name Unknown
		10	Requested Service (Authentication or Encrypted) Not Available
		11	Unknown Security Recipient
		12	Incorrect Message Length (Encryption Only)
		13	Message Authentication Code Failed
		15	Unknown Security Originator
		16	Syntax Error in Decrypted Text
		17	Security Not Supported
		23	Transaction Set Control Number Not Unique within the Functional Group
		24	S3E Security End Segment Missing for S3S Security Start Segment
		25	S3S Security Start Segment Missing for S3E Security End Segment
		26	S4E Security End Segment Missing for S4S Security Start

		27	Segment S4S Security Start Segment Missing for S4E Security End
		27	Segment
AK504	718	Transaction Set S	yntax Error Code O ID 1/3
		Code indicating err	or found based on the syntax editing of a transaction set
		1	Transaction Set Not Supported
		2	Transaction Set Trailer Missing
		3	Transaction Set Control Number in Header and Trailer Do Not Match
		4	Number of Included Segments Does Not Match Actual Count
		5	One or More Segments in Error
		6	Missing or Invalid Transaction Set Identifier
		7	Missing or Invalid Transaction Set Control Number
		8	Authentication Key Name Unknown
		9	Encryption Key Name Unknown
		10	Requested Service (Authentication or Encrypted) Not Available
		11	Unknown Security Recipient
		12	Incorrect Message Length (Encryption Only)
		13	Message Authentication Code Failed
		15	Unknown Security Originator
		16	Syntax Error in Decrypted Text
		17	Security Not Supported
		23	Transaction Set Control Number Not Unique within the Functional Group
		24	S3E Security End Segment Missing for S3S Security Start Segment
		25	S3S Security Start Segment Missing for S3E Security End Segment
		26	S4E Security End Segment Missing for S4S Security Start Segment
		27	S4S Security Start Segment Missing for S4E Security End Segment
AK505	718	Transaction Set S	yntax Error Code O ID 1/3
		Code indicating err	or found based on the syntax editing of a transaction set
		1	Transaction Set Not Supported
		2	Transaction Set Trailer Missing
		3	Transaction Set Control Number in Header and Trailer Do Not Match
		4	Number of Included Segments Does Not Match Actual Count
		5	One or More Segments in Error

	6	Missing or Invalid Transaction Set Identifier
	7	Missing or Invalid Transaction Set Control Number
	8	Authentication Key Name Unknown
	9	Encryption Key Name Unknown
	10	Requested Service (Authentication or Encrypted) Not Available
	11	Unknown Security Recipient
	12	Incorrect Message Length (Encryption Only)
	13	Message Authentication Code Failed
	15	Unknown Security Originator
	16	Syntax Error in Decrypted Text
	17	Security Not Supported
	23	Transaction Set Control Number Not Unique within the Functional Group
	24	S3E Security End Segment Missing for S3S Security Start Segment
	25	S3S Security Start Segment Missing for S3E Security End Segment
	26	S4E Security End Segment Missing for S4S Security Start Segment
	27	S4S Security Start Segment Missing for S4E Security End Segment
AK506	718 Transaction Set S	Syntax Error Code O ID 1/3
AK506		Syntax Error Code O ID 1/3 ror found based on the syntax editing of a transaction set
AK506		
AK506	Code indicating er	Transaction Set Not Supported Transaction Set Trailer Missing
AK506	Code indicating er	ror found based on the syntax editing of a transaction set Transaction Set Not Supported
AK506	Code indicating er 1 2	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do
AK506	Code indicating er 1 2 3	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual
AK506	Code indicating er 1 2 3	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count
AK506	Code indicating er 1 2 3 4 5	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error
AK506	Code indicating er 1 2 3 4 5 6	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier
AK506	Code indicating er 1 2 3 4 5 6 7	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number
AK506	Code indicating er 1 2 3 4 5 6 7 8	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number Authentication Key Name Unknown
AK506	Code indicating er 1 2 3 4 5 6 7 8 9	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number Authentication Key Name Unknown Encryption Key Name Unknown Requested Service (Authentication or Encrypted) Not
AK506	Code indicating er 1 2 3 4 5 6 7 8 9 10	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number Authentication Key Name Unknown Encryption Key Name Unknown Requested Service (Authentication or Encrypted) Not Available
AK506	Code indicating er 1 2 3 4 5 6 7 8 9 10	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number Authentication Key Name Unknown Encryption Key Name Unknown Requested Service (Authentication or Encrypted) Not Available Unknown Security Recipient
AK506	Code indicating er 1 2 3 4 5 6 7 8 9 10 11 12	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number Authentication Key Name Unknown Encryption Key Name Unknown Requested Service (Authentication or Encrypted) Not Available Unknown Security Recipient Incorrect Message Length (Encryption Only)

17	Security Not Supported
23	Transaction Set Control Number Not Unique within the Functional Group
24	S3E Security End Segment Missing for S3S Security Start Segment
25	S3S Security Start Segment Missing for S3E Security End Segment
26	S4E Security End Segment Missing for S4S Security Start Segment
27	S4S Security Start Segment Missing for S4E Security End Segment

Segment: AK9 Functional Group Response Trailer

Position: 070

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose: To acknowledge acceptance or rejection of a functional group and report the number of

included transaction sets from the original trailer, the accepted sets, and the received sets

in this functional group

Syntax Notes:

Semantic Notes:

Comments: 1 If AK901 contains the value "A" or "E", then the transmitted functional group is

accepted.

	Ref.	Data		·		
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
M	AK901	715	Functional Group	Acknowledge Code	M	ID 1/1
			Code indicating according functional group	cept or reject condition based on the synta	x edit	ting of the
			A	Accepted		
			Е	Accepted, But Errors Were Noted.		
			M	Rejected, Message Authentication Code	e (MA	AC) Failed
			P	Partially Accepted, At Least One Trans Rejected	actior	n Set Was
			R	Rejected		
			W	Rejected, Assurance Failed Validity Te	sts	
			X	Rejected, Content After Decryption Co Analyzed	uld N	ot Be
M	AK902	97	Number of Transa	action Sets Included	M	N0 1/6
				unsaction sets included in the functional grainsion) group terminated by the trailer co		
M	AK903	123	Number of Receiv	ed Transaction Sets	M	N0 1/6
			Number of Transac	etion Sets received		
M	AK904	2	Number of Accept	ted Transaction Sets	M	N0 1/6
			Number of accepted	d Transaction Sets in a Functional Group		
	AK905	716	Functional Group	Syntax Error Code	0	ID 1/3
			Code indicating err header and/or traile	for found based on the syntax editing of the	e fun	ctional group
			1	Functional Group Not Supported		
			2	Functional Group Version Not Support	ed	

		3	Functional Group Trailer Missing	
		4	Group Control Number in the Functional Group Hea and Trailer Do Not Agree	ıder
		5	Number of Included Transaction Sets Does Not Mate Actual Count	ch
		6	Group Control Number Violates Syntax	
		10	Authentication Key Name Unknown	
		11	Encryption Key Name Unknown	
		12	Requested Service (Authentication or Encryption) N Available	ot
		13	Unknown Security Recipient	
		14	Unknown Security Originator	
		15	Syntax Error in Decrypted Text	
		16	Security Not Supported	
		17	Incorrect Message Length (Encryption Only)	
		18	Message Authentication Code Failed	
		19	S1E Security End Segment Missing for S1S Security Segment	/ Start
		20	S1S Security Start Segment Missing for S1E End Segment	
		21	S2E Security End Segment Missing for S2S Security Segment	/ Start
		22	S2S Security Start Segment Missing for S2E Securit Segment	y End
		23	S3E Security End Segment Missing for S3S Security Segment	/ Start
		24	S3S Security Start Segment Missing for S3E End Segment	
		25	S4E Security End Segment Missing for S4S Security Segment	/ Start
		26	S4S Security Start Segment Missing for S4E Securit Segment	y End
AK906	716	Functional Group	Syntax Error Code O ID 1/3	3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer		
		1	Functional Group Not Supported	
		2	Functional Group Version Not Supported	
		3	Functional Group Trailer Missing	
		4	Group Control Number in the Functional Group Hea and Trailer Do Not Agree	ıder
		5	Number of Included Transaction Sets Does Not Mate Actual Count	ch
		6	Group Control Number Violates Syntax	
		10	Authentication Key Name Unknown	

		11	Encryption Key Name Unknown
		12	Requested Service (Authentication or Encryption) Not Available
		13	Unknown Security Recipient
		14	Unknown Security Originator
		15	Syntax Error in Decrypted Text
		16	Security Not Supported
		17	Incorrect Message Length (Encryption Only)
		18	Message Authentication Code Failed
		19	S1E Security End Segment Missing for S1S Security Start Segment
		20	S1S Security Start Segment Missing for S1E End Segment
		21	S2E Security End Segment Missing for S2S Security Start Segment
		22	S2S Security Start Segment Missing for S2E Security End Segment
		23	S3E Security End Segment Missing for S3S Security Start Segment
		24	S3S Security Start Segment Missing for S3E End Segment
		25	S4E Security End Segment Missing for S4S Security Start Segment
		26	S4S Security Start Segment Missing for S4E Security End Segment
AK907	716	Functional Group	Syntax Error Code O ID 1/3
		Code indicating err header and/or traile	for found based on the syntax editing of the functional grouper
		1	Functional Group Not Supported
		2	Functional Group Version Not Supported
		3	Functional Group Trailer Missing
		4	Group Control Number in the Functional Group Header and Trailer Do Not Agree
		5	Number of Included Transaction Sets Does Not Match Actual Count
		6	Group Control Number Violates Syntax
		10	Authentication Key Name Unknown
		11	Encryption Key Name Unknown
		12	Requested Service (Authentication or Encryption) Not Available
		13	Unknown Security Recipient
			Unknown Somety Originator
		14	Unknown Security Originator
		14 15	Syntax Error in Decrypted Text

		17	Incorrect Message Length (Encryption Only)
		18	Message Authentication Code Failed
		19	S1E Security End Segment Missing for S1S Security Start Segment
		20	S1S Security Start Segment Missing for S1E End Segment
		21	S2E Security End Segment Missing for S2S Security Start Segment
		22	S2S Security Start Segment Missing for S2E Security End Segment
		23	S3E Security End Segment Missing for S3S Security Start Segment
		24	S3S Security Start Segment Missing for S3E End Segment
		25	S4E Security End Segment Missing for S4S Security Start Segment
		26	S4S Security Start Segment Missing for S4E Security End Segment
AK908	716	Functional Group	Syntax Error Code O ID 1/3
		Code indicating err header and/or traile	or found based on the syntax editing of the functional group or
		1	Functional Group Not Supported
		2	Functional Group Version Not Supported
		3	Functional Group Trailer Missing
		4	Group Control Number in the Functional Group Header and Trailer Do Not Agree
		5	Number of Included Transaction Sets Does Not Match Actual Count
		6	Group Control Number Violates Syntax
		10	Authentication Key Name Unknown
		11	Encryption Key Name Unknown
		12	Requested Service (Authentication or Encryption) Not Available
		13	Unknown Security Recipient
		14	Unknown Security Originator
		15	Syntax Error in Decrypted Text
		16	Security Not Supported
		17	Incorrect Message Length (Encryption Only)
		18	Message Authentication Code Failed
		19	S1E Security End Segment Missing for S1S Security Start Segment
		20	S1S Security Start Segment Missing for S1E End Segment
		21	S2E Security End Segment Missing for S2S Security Start

			Segment
		22	S2S Security Start Segment Missing for S2E Security End Segment
		23	S3E Security End Segment Missing for S3S Security Start Segment
		24	S3S Security Start Segment Missing for S3E End Segment
		25	S4E Security End Segment Missing for S4S Security Start Segment
		26	S4S Security Start Segment Missing for S4E Security End Segment
AK909	716	Functional Group	Syntax Error Code O ID 1/3
		Code indicating error header and/or trailer	or found based on the syntax editing of the functional group
		1	Functional Group Not Supported
		2	Functional Group Version Not Supported
		3	Functional Group Trailer Missing
		4	Group Control Number in the Functional Group Header and Trailer Do Not Agree
		5	Number of Included Transaction Sets Does Not Match Actual Count
		6	Group Control Number Violates Syntax
		10	Authentication Key Name Unknown
		11	Encryption Key Name Unknown
		12	Requested Service (Authentication or Encryption) Not Available
		13	Unknown Security Recipient
		14	Unknown Security Originator
		15	Syntax Error in Decrypted Text
		16	Security Not Supported
		17	Incorrect Message Length (Encryption Only)
		18	Message Authentication Code Failed
		19	S1E Security End Segment Missing for S1S Security Start Segment
		20	S1S Security Start Segment Missing for S1E End Segment
		21	S2E Security End Segment Missing for S2S Security Start Segment
		22	S2S Security Start Segment Missing for S2E Security End Segment
		23	S3E Security End Segment Missing for S3S Security Start Segment
		24	S3S Security Start Segment Missing for S3E End Segment
		25	S4E Security End Segment Missing for S4S Security Start

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Segment

26 S4S Security Start Segment Missing for S4E Security End Segment

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Segment: ${\bf SE}$ Transaction Set Trailer

Position: 080

Loop:

Level:

Usage: Mandatory

Max Use:

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

	Ref.	Data			
	Des.	Element	<u>Name</u>	Attr	<u>ibutes</u>
M	SE01	96	Number of Included Segments	M	N0 1/10
			Total number of segments included in a transaction set include segments	ling S	T and SE
M	SE02	329	Transaction Set Control Number	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set		
			Must be same as ST02		

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5. Business Data Processing Agreements

The following pages are business data processing agreements reached by CHCS and DEERS while exchanging electronic messages via the X12 Interface Engine.

The DEERS X12 Interface Engine operates as 24 hour 7 days a week application with the exception of scheduled maintenance window. Maintenance Monday – Friday 11:56 p.m. – 1:00 a.m. EST and Saturday 9:00 p.m. – Sunday 6:00 a.m. EST (subject to change upon notice).

5.1. Communication Protocol

5.1.1. Introduction

This section provides a description of how CHCS will communicate with DEERS. The HyperText Transfer Protocol (HTTP) has been selected as the network application protocol by which such communication will occur. DMDC will make available a Web server that will act as an intermediary between CHCS and the DEERS X12 translation engine.

At a fundamental level, CHCS must accomplish the following to communicate with DEERS:

- Connect to the DMDC Web server by using the basic constructs of TCP/IP sockets.
- Package an X12 message in an HTTP formatted request
- Send the HTTP request to the Web server.
- Receive an HTTP response containing the X12 response.

This is not the *only* method by which the HTTP connection/request/response interaction could occur. Some programming languages provide more abstracted methods of using HTTP. For example, Java has several HTTP-related classes, e.g., the HttpUrlConnection class that could be used instead of the Socket class; if such a method is available, then it would be prudent to explore the possibility of utilizing it.

It should be noted that CHCS is NOT required to implement its own Web server.

DEERS expects each CHCS system to have two or more processes or threads communicating with DEERS, via the HTTP protocol described above, at the same time. CHCS may be required to open more connections to DEERS (via the Web server) than are currently used in CHCS's communications with legacy DEERS. The number of connections needed should be adjusted during performance tuning and based on the expected volume of transactions from the particular CHCS site. CHCS and DEERS will jointly develop performance tuning data and guidelines during the contractor-testing phase of the project.

5.1.2. HTTP and the POST Request

HTTP is the application protocol that forms the backbone of the World Wide Web. HTTP has a number of request methods, headers, and codes. The "POST" request best suites the communication needs of both DMDC and CHCS by allowing a client to send large amounts of data to a Web server within the body of the request.

The following is a generic POST format example:

POST <URL> HTTP/1.1
Host: <hostname>

Content-Type: <mime-type>
Content-Length: <length>

<body>

CHCS will utilize the HTTP POST request to send X12 messages to DEERS.² To execute the POST request, CHCS will first open a TCP/IP socket connection to the DMDC Web server. CHCS will then prefix the X12 message with the appropriate POST method headers, an example of which as follows:

¹ For full details on HTTP, see http://www.w3.org/Protocols/.

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```
POST http://reprisal.int.dmdc.osd.mil/appj/X12/servlet/X12HTTPServlet HTTP/1.1
Host: reprisal.int.dmdc.osd.mil
Content-Type: application/x-www-form-urlencoded
Content-Length: 462
```

Notes:

- The URL in the first line of the header is simply an example. The actual URL will be furnished at a later date.
- The blank line between the content-length and the body of the message is required.
- The length referred to in "Content-length" includes the X12 message, the parameter name ("X12Message"), and the "=" sign.
- This is ASCII text in which a CRLF is present after each header line. There are two CRLFs located after the Content-Length that generate a blank line between the header and the body of the request.
- The X12 message itself is one long string. CRLFs are **NOT IMPLIED** after each line within the X12 message. The lines are wrapped due to the limited width of this page.

5.1.3. How CHCS Will Communicate with DEERS

The DMDC Web server will receive the above POST request and route it to a Java servlet that runs on a DMDC application server. The Java servlet then extracts the X12 message from the body of the HTTP POST request, opens a connection to the SeeBeyond Mux eWay, sends the X12 message to the Mux, and waits for a response from the Mux.

The SeeBeyond engine checks the X12 message for HIPAA compliance and then translates it to a proprietary DEERS transfer record (TR). The TR is then sent to DEERS. The SeeBeyond engine waits for and receives the response back from DEERS, translates the response back into HIPAA-compliant X12 format, and then sends the X12 message back through the Mux eWay to the Java servlet.

The Java servlet receives the response from the Mux, packages the response into HTTP format, and sends the response back to CHCS. After having sent the POST request through the socket connection that was created with the DMDC Web server, CHCS will begin reading from that same socket connection. Given that the POST request was formatted similarly to the above example, CHCS will receive the following type of response from the DEERS Web server across the socket connection:

```
HTTP/1.1 200 OK
Date: Wed, 19 Jun 2002 18:26:54 GMT
Server: Oracle9iAS (9.0.2.0.0) Containers for J2EE
Content-Type: text/html
<body - the X12 271 response>
```

² Note: HTTP version 1.1 will be used.

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5.1.4. HTTP and State

It should be noted that HTTP is a stateless protocol in which each request/response is executed independently. The connection to the Web server is opened, the request sent, the response received, and the connection closed. State is not maintained between POSTs.

HTTP Status (Error) Codes

When the X12 Java HTTP servlet responds back to the CHCS client, the response will contain HTTP headers as well as the body of the response. For example,

HTTP/1.1 200 OK
Date: Wed, 19 Jun 2003 18:26:54 GMT
Server: Oracle9iAS (9.0.2.0.0) Containers for J2EE
Content-Type: text/html

<body - the X12 response>

The first line of the HTTP headers will contain the HTTP version number, a numeric status code, and a text message associated with the status code. The status code indicates whether or not problems were encountered during the transaction.

The following are the HTTP status codes that CHCS may expect to encounter in responses returned from the X12 Java HTTP servlets:

Status Code	Status Text	Explanation
200	OK	Request was successful.
400	Bad Request	A parameter was missing from the body of the HTTP request sent to the servlet.
500	Internal Server Error	Either a problem exists within the web / application server or there is a communications problem in the network.
502	Bad Gateway	The X12 Servlet is not connected to the X12 Translation Engine.
503	Service Unavailable	The X12 Servlet did not receive a response from the X12 Engine (A timeout occurred).

5.2. Security

5.2.1. Introduction

HIPAA legislation mandates protection of the privacy of electronically transmitted health care information. This section provides a description of how CHCS and DEERS will meet this requirement.

5.2.2. Virtual Private Network

In compliance with the Tri-Service Infrastructure Management Program Office (TIMPO) desire to integrate CHCS-to-DEERS security within TIMPO's enterprise-wide security solution for MHS, a Virtual Private Network (VPN) will be responsible for securing the privacy of the data transmitted between DEERS and CHCS. The VPN's primary function will be to perform services to protect and secure the data being sent over the Defense Information System Network (DISN).

5.2.3. Virtual Private Network Equipment

Each CHCS site will be equipped with an Avaya VPN hardware device. Tri-Service Infrastructure Management Program Office (TIMPO) will provide DMDC with a similar, compatible Avaya VPN device, which will reside at Auburn Hills, Michigan. A backup VPN appliance will also be provided and stored at Auburn Hills, to be used in the event of a failure in the primary VPN device.

5.2.4 Management of the Virtual Private Network

DISA will be responsible for the management of the VPN. The roles and responsibilities of CHCS and DMDC still need to be defined, with respect to the installation, configuration, management, maintenance, and response to various types of problems and alerts. DMDC and CHCS/TIMPO will work together to develop such roles, responsibilities, procedures and processes.

DMDC will have the capability of doing real-time monitoring of the VPN status.

5.3. Business Rules Processing

5.3.1 General Processing Requirements

It has been established and agreed upon that the CHCS Interface with DEERS is an on-line/real-time query and response interaction. Each inquiry/update will be encapsulated in an ASC X12 Interchange and Functional Group envelope consistent with the 4010 version of the ASC X12 Standard, and in accordance with the HIPAA 4010X092 Implementation Guideline where applicable.

The agreed upon element delimiter, sub-element delimiter and segment terminator which will be used to construct X12 messages are {* , : , ! } respectively. Each inquiry/update will have a unique trace number assigned by the external-trading partner. The 270/271 BHT03 element must be 20 bytes in length - alphanumeric. The 275 BGN02 element must be 20 bytes in length - alphanumeric.

PERSON IDENTIFICATION

As stated in the EIS, the Inquiry Person ID Type Code and the Inquiry Person ID are required when performing an inquiry if the Patient ID is not used. The sponsor's Inquiry Person Id Type Code and Inquiry Person Id or the sponsor's Patient ID is should be supplied on all inquiries, exclusion of such data may result in misleading or incorrect response.

PARTIAL MATCH

In observation of the HIPAA Privacy Act DEERS, in those instances where multiple dependents where found the X12 DEERS Interface Engine will return only the sponsor person information of families.

INQUIRIES

The X12 DEERS Interface Engine will return negative acknowledgement of no health care coverage. The Health Care Delivery Program Coverage Code of 000 will be returned. When performing a dependent inquiry, providing the required sponsor level information, if the individual is not found no other family information will be returned. One can re-inquire using a unique ID or perform a sponsor level family inquiry.

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APPENDIX A BUSINESS DATA PROCESSING AGREEMENTS

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Appendix A: Business Data Processing Agreements

We have agreed and established that there are 2 types of possible inquiry/update to the DEERS X12 interface:

- 1. 270 Healthcare Coverage Eligibility Inquiry
- 2. 275 Patient Update

We have agreed and established that there are 10 types of possible responses from the DEERS X12 Interface:

- 1. 271 Full Response Eligibility data for an individual and/or family.
- 2. 271 Partial Match Response Sponsor or person data returned when multiple individuals are found. Used to assist in re-inquiry, a unique identifier (patient identifier) is recommended.
- 3. 271 Error Response Person not found, utilizing the Triple A segment.
- 4. 271 Error Response DEERS unable to respond utilizing the Triple A segment.
- 5. 997 Functional Acknowledgment Message structure in error.
- 6. TA1 Response Invalid or Unauthorized Trading Partner relationship.
- 7. HTTP communication NAK URL or Servlet failure.
- 8. 275 Patient Update Notification of patient/person update.
- 9. 824 Application Acknowledgment Signifying a successful or failed patient update.
- 10. 824 Application Acknowledgment DEERS unable to respond.

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